# A GUIDE FOR USING LABOR MARKET DATA TO IMPROVE STUDENT SUCCESS



# The Aspen Institute and Aspen Prize for Community College Excellence

The Aspen Institute's College Excellence Program (CEP) works to identify and replicate college practices and policies aimed at significantly improving student outcomes. A central way CEP pursues this goal is through the Aspen Prize for Community College Excellence. To administer the Prize each year, CEP gathers quantitative data about student success at the nation's community colleges and qualitative information about what is happening at institutions that are achieving high and/or improving levels of student success in four areas: learning, completion, labor market, and equitable outcomes. This guide is one of a series of publications through which the College Excellence Program will share what it has learned through the Prize's information gathering process.

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#### Introduction

Never before has the link between a college education and postgraduate job prospects been more important. College graduates are employed more often and, on average, earn significantly more than those without college degrees.<sup>1</sup> During recent years, as students have moved into a challenging job market, a college education has remained the most reliable defense against unemployment.<sup>2</sup>

At the same time, investments in higher education can no longer be taken for granted. States—facing their own financial and economic challenges—are making choices about how much and where to invest in higher education. Several are examining which state expenditures will most likely enable students to graduate with the skills needed to fill jobs that will help states' economies grow.<sup>3</sup>

Students too are increasingly considering how to make higher education choices that offer the best return on their investments of time and money. They are questioning whether a college education is worth pursuing and which of their increasing number of choices for higher education will be both affordable and likely to result in a good job.

Trying to meet the needs and expectations of both states and students, community colleges are often caught in the middle. States are cutting budgets while students expect courses to remain available and tuition to stay low. Especially in states where cuts have been too rapid to be readily replaced by new tuition or other revenue sources, colleges are making tough choices, assessing which course offerings and programs they should maintain to meet students' and employers' needs and which to cut to keep the institution financially viable.

Like their students and state officials, community college leaders know that there are great divergences in labor market returns for different credentials. Although they can easily determine that nurses almost always earn more than hairdressers, they may not know that a radiation therapist with an associate's degree earns an average of \$75,000 per year,<sup>4</sup> while a veterinary technician, who also needs an associate's degree, earns an average of only \$30,000.<sup>5</sup>

Although states can gain access to the labor data they need to make informed decisions, colleges often cannot. Too often, they have inadequate information to determine which degrees from their colleges lead to high-wage jobs. Community colleges need more and better information on students' post-graduation professional lives to understand how well their educational programs are equipping students to thrive professionally and achieve economic self-sufficiency.

#### THE PURPOSE OF THIS GUIDE

This guide aims to advance colleges' understanding of how to access and use labor market data to improve student success. The three sections that follow provide:

- A description of how colleges can effectively use labor market data.
- An inventory of available data sources.
- Recommendations for what colleges can do to improve labor market data use and access.

The examples in this guide come from community colleges, gathered primarily through explorations related to the Aspen Prize for Community College Excellence. However, four-year colleges are also facing budget challenges and increasing expectations to deliver measurable results. Against this backdrop, this guide can also assist four-year colleges as they seek to understand labor market outcomes for bachelor's degree programs.

#### THE POWER OF LABOR MARKET DATA

The need to track the employment and earnings of graduates is by no means new to community colleges. They have reported information about job outcomes for graduates of their career and technical education (CTE) programs to federal and state agencies for decades. In recent years, colleges have also increasingly examined data on regional job trends to align their program offerings with projected labor market needs. Some colleges are now even experimenting with providing students such information to help them choose a major, both as a way to increase the chances of graduation and to improve the chances that students' choices will lead them to living-wage jobs and strong career paths.

However, the availability of rigorous empirical data has not kept up with increased institutional demand.<sup>6</sup> Even though most community colleges survey students graduating from CTE programs about subsequent employment, low response rates and biases inherent in self-reporting limit the reliability of such reports.<sup>7</sup> Moreover, such surveys are typically conducted only on graduates of CTE programs, and aim to gather information on students only immediately after they graduate. Community and four-year colleges rarely inquire about labor market outcomes for general education degree graduates or investigate the results beyond the first year after graduation for those receiving any credential.

# New and Emerging Sources of Data

Today, there is a growing opportunity for colleges to access useful labor market data. States have long collected employment data for purposes of administering unemployment insurance (UI), and now several have started to match UI records with those of college graduates to generate aggregate employment and wage data. Although these data must comply with Federal laws and regulations, recent changes to the Family Educational Rights and Privacy Act (FERPA) regulations have created new possibilities for data sharing. In addition to matching records in a state, twenty-two states have signed up to share UI records with one another, meaning those states now have access to information about the job outcomes of students who leave the state. Although effective and efficient systems for getting these data to colleges are still in their infancy in most states, advanced examples, such as the system used in Florida, illuminate the potential value of pushing for increased access to this important resource.

In addition to UI data, proprietary databases are being used to aggregate job postings from the internet, providing colleges with a new window into understanding labor markets in their communities. By shedding

light on job openings that actually exist at any given time, these data sources can help colleges and their students better understand the connection between certain credentials and the employment opportunities and wages those credentials might command.

A third data set was released in June of 2012, when the Department of Education released "gainful employment" reports, containing job placement rates for 3,695 vocational programs at 1,336 institutions, including community colleges, public and private four-year colleges, and for-profit colleges. Although a recent court decision makes it unclear whether these reports will be replicated in the future, the 2012 data sets provide a snapshot colleges can use to assess the effectiveness of some of their programs compared to the same programs at other institutions.<sup>10</sup>

The emergence of these new data sets suggests the dawning of a new era in which labor market data will be increasingly available to colleges, their students, and many other actors seeking to measure and improve student success.

#### Using These Data to Inform Change

Labor market data provide information that many stakeholders on college campuses—including the president, vice presidents, deans, department chairs, faculty, staff, and students—can use to understand and improve the link between what colleges offer and what happens to students after they graduate. Specifically, labor market data can be used to:

- Decide which college programs to offer and how many graduates a college should aim to produce to fill available jobs related to the program.
- Assess program effectiveness, signaling whether a college's programs provide the necessary skills, both in terms of specific competencies and appropriate rigor, for students to succeed after they graduate.
- Help students make informed choices about which programs to enter, both by accelerating student decision-making and thereby increase chances for graduation and by enhancing the likelihood they will choose a degree aligned to a well-paid, available job.
- Advocate for the college by using data on graduates' employment outcomes to demonstrate to the state and others that investments in the college are worthwhile, and will go beyond broadening access to delivering graduates able to contribute to their families, communities, and states.

To be clear, labor market data cannot alone provide all of the labor market information colleges need to make good decisions. As the remainder of this guide makes clear, although labor market projections and results can provide critical facts to assess the viability and efficacy of a program, they cannot provide some important nuances about local labor markets and trends.

As many effective community college leaders have long understood, deep and regular engagement with employers and others in their communities is essential to understanding how to match student education with job needs. If graduates are not getting jobs, discussions with employers can help a college understand what skills students lack and change the curriculum accordingly. If graduates' wages are increasing, employers can help a college understand whether the trend is likely to continue, informing decisions about how and whether to expand a program and if so by how much. And if jobs in a sector are drying up, employers can help colleges understand the likely trajectory of the future labor market, informing what programs the college can create or expand to replace declining job opportunities.

# HOW COLLEGES ARE USING LABOR MARKET DATA TO IMPROVE STUDENT OUTCOMES

Labor market data play a powerful role in providing analytic information that cannot be gathered elsewhere and in ensuring higher levels of student success in several key ways. To help colleges understand how this information can become a springboard for institutional or programmatic change, we have provided below examples of colleges that are currently using employment and wage data to improve outcomes for students.



Developing Programs Tailored to Specific Job Opportunities

In Watertown, South Dakota, Lake Area Technical Institute (LATI) frequently receives requests from state agencies, industry, and students to open new programs. A college committee meets regularly to evaluate the potential of new programs through a comprehensive assessment of labor market needs, student demand, and the college's capacity to provide a high-quality educational experience that will lead to students' long-term success.

In response to significant student inquiry in recent years, LATI looked into launching a veterinary technician program.

A thorough review of the labor market, including examination of projected job openings from the state employment agency and conversations with regional employers, revealed two important insights: (1) demand was low for traditional small animal veterinary technicians, and (2) there was a strong need for expertise with large animals.

The college decided not to pursue a new veterinary technician program, even though such a program would have been directly responsive to student demand. Instead, LATI enhanced an existing agricultural program with an option to focus on working with large animals.

Many colleges cite student demand as the central justification for opening or maintaining a program, sometimes leading to initiation of new programs that increase enrollment and bring in revenue without ensuring that real jobs are available after graduation. By looking at data, leaders at LATI avoided this pitfall.

LATI's decision reflects something important about how the college defines its core mission: to provide students with high-quality education while on campus and to make sure that graduates can flourish professionally after graduating. To achieve this goal, leaders at the college have come to understand that faculty and staff cannot just look at what happens within the four walls of the college. As LATI Vice President Michael Cartney notes, examining labor market data from a wide range of sources is simply "a way of life" at LATI. As a result, the vast majority of LATI students either are continuing their education or are employed after graduating.

#### Right-Sizing Existing Programs

Labor market data can also be extremely valuable to college administrators looking to evaluate the extent to which existing programs are producing the appropriate number of graduates for existing labor market opportunities.

Located in Northern California, Cabrillo is one of 26 community colleges in the region, many of which offer medical assisting programs. Enrollment had always been strong in the Medical Assisting program at Cabrillo, but feedback from an annual survey of graduates of the program revealed that many were not getting jobs in the field. Cabrillo then accessed labor market data from two proprietary databases, reached out to employers, and reflected on the total number of medical assistants produced across the region. The college learned that the market was saturated. Looking back, the college's dean of CTE Rock Pfotenhauer noted, "We didn't pay a great deal of attention to these data while the economy was growing and unemployment was low, but when the recession began, it became clear that we could no longer assume that program completion would result in employment."

Because of this investigation, Cabrillo reduced the size of the Medical Assisting program to reduce the odds that its students would be prepared for jobs that did not exist. "Our labor markets are regional rather than local," Pfotenhauer said. "In medical assisting, as in other fields, it became clear to us that there would be many advantages to our students, to employers, and to the college, to our coordinating with other medical assisting programs across the region."

## Improving Program Quality

Information about the labor market and employer needs can do more than just assist colleges in matching program enrollment to projected job openings. When Cabrillo College discovered that its students were not finding employment in the medical assisting field at a rate commensurate with expectations, it triggered a deeper investigation.

Cabrillo reached out to employers to understand these poor student employment outcomes. Pfotenhauer explains, "A frank discussion with employers revealed that they did not feel our program was keeping up with the increasingly high standards required for success in this occupation." The college followed up by inviting over 20 representatives from area employers to a lunch meeting. "We came away from this difficult conversation with a clear understanding that we needed to increase the rigor of our program, particularly in the area of the fundamental skills of English and math," Pfotenhauer describes.

In response, Cabrillo set out to improve program quality. It thoroughly redesigned the medical assisting program, increasing emphasis on the foundational English and math skills that employers noted were lacking. It also shifted the program to a cohort model with greater structure than before, an approach that was showing higher success rates for similar students in other CTE programs.

Although it is too soon to assess the ultimate impact of this redesign, Cabrillo has recently completed the first semester of the new medical assisting program, and results have exceeded expectations. Importantly, college and program leaders know exactly where to look to figure out whether the changes they have implemented work: a combination of post-graduation surveys, labor market data, and active and ongoing engagement with employers. With this knowledge and a commitment to improving outcomes, the college has established the conditions for further advances the labor market success of its graduates.

#### Closing Programs with Low Returns

Colleges can use labor data to understand which of their programs have the greatest positive returns on graduates' employment and earnings, and which should be closed because those returns are too small. Such analysis is especially important at a time when colleges are facing severe financial challenges.

Monroe Community College in Rochester, New York uses a variety of data sources when evaluating the viability of its CTE programs, including a proprietary labor market database, information from the US Department of Labor specific to its region, US Census data, feedback from industry advisory boards, and survey responses from recent graduates.<sup>11</sup> The college's institutional researcher interprets this information, producing reports that Monroe's administration regularly reviews.

Based on these reports, college leaders assess not just whether their programs are preparing students for available jobs, but also whether those jobs will offer opportunities for advancement. Monroe Vice President Todd Oldham describes the questions used to evaluate program viability: are students getting jobs, are those jobs providing a strong living wage, and do those jobs offer opportunities for advancement and growth over the long term? Oldham sums up these inquiries as one key question: "What is the pathway we are putting students on?"

If that pathway results in a dead end, the college shuts it off. For example, Monroe recently closed its Massage Therapy program because labor market data made clear that there were simply not enough jobs for graduates to warrant keeping that pathway open. Regular reviews ensure that programs offered to students provide the chance for strong labor market outcomes and robust career pathways. 12

#### Helping Undecided Students Choose

Studies show that college students who choose a program of study have higher completion rates than those who remain undecided.<sup>13</sup> This makes intuitive sense; students without a specific goal will have a harder time choosing courses and have less clarity about why they should complete a degree.

Understanding that accelerating decisions can increase graduation rates, community colleges are helping undecided students choose degree programs by making available information about how many jobs exist in different fields, how much those fields are growing, and how much jobs in those fields pay. For example, Montgomery County Community College in Blue Bell, Pennsylvania uses a proprietary labor market computer application as one of several tools to assist students in choosing programs. Students can search potential occupations to assess earning potential, current and projected job opportunities in the region, and which education and training programs at Montgomery will prepare them for those jobs. Montgomery faculty and staff use this application as a springboard for discussion with their students, referencing it in student orientation materials, handouts provided to students seeking employment guidance, and one-on-one appointments with counselors.

Similarly, Central Lakes College in Brainerd, Minnesota provides employment and wage data to students through an online tool provided by the state and in a career-planning course. During the course, students complete an assignment designed to identify their desired lifestyle and then use software to determine the level of wages they will need to support that lifestyle. Understanding the wages they want to earn, students explore different careers of interest that might offer those wages and the employment outlook for different specific jobs. 14

#### Outreach to Potential Students

Monroe Community College uses labor market data to connect prospective students with career and technical programs that lead to jobs with good salaries. The college's work begins when leaders examine data that reveal which programs currently offered by the college link directly to local hiring opportunities and strong wages. It then makes this information, which is embedded in an easy-to-use web-based tool, available to potential students.

To reach potential students, the college works with partners who regularly interact with prospective students, such as the Rochester City School District's Office of Adult & Career Education Services (OACES). The OACES program selects a group of participants who have attained college-ready reading and writing skills and have an interest in further education. Monroe then provides these students a free professional awareness course that uses the web-based career tool to teach them how to select a career path by taking into account job demand and wages. Because it works with adults seeking a high school degree or GED, OACES partners with Monroe on this program to reach many students who have traditionally been unemployed.

Monroe Vice President Todd Oldham describes why it is so important to drive students toward high demand occupations. His years in the field have taught him that many who could benefit from such occupations are unaware of job openings, the salaries they offer, or the credentials needed to secure them. The class and the tool offered by Monroe are designed to help both high school students and adults seeking new training see clear pathways to existing jobs they may have never thought about and then to pursue the higher education needed to take advantage of those opportunities.

Currently, Monroe is applying this strategy to fill a deficit of skilled professionals in advanced manufacturing in the area around the college. According to Oldham, most residents think manufacturing is a "dead profession." Through the tool and classes it offers, Monroe is beginning to reverse this perception, providing strong job skills to students, filling employer needs for a labor force with relevant training, and strengthening the local economy along the way.

Central Lakes also uses labor market data to inform prospective students. Each year, the college's Bridges Career Exploration Day draws more than 2,300 regional high school students and over 150 employer representatives, who engage students in hands-on activities to simulate what it is like to work in over 100 different career areas. At the entrance to each career cluster area, staff members distribute wage and career outlook information to interested high school students. Rebecca Best, the college's dean of workforce, economic, and regional development, describes the impact of the Bridges Career Exploration Day: "Students feel that all of this information has helped them greatly to narrow down their career choices prior to graduating from high school."

## Advocating for the Value of Community Colleges

Community college leaders can also use labor market data to demonstrate the value of their institutions to legislators and other key decision-makers. In today's fiscal climate, students, their families, and states are making tough decisions about where to spend limited dollars. In the face of competing demands, students and states alike need to know that their choices will be cost-effective and result in significant returns. Specific employement market outcome data for graduates can help a college show the benefits of a college education to prospective students, to companies seeking an educated labor force, and to state government officials aiming to expand economic opportunity and enhance state tax revenue.

Importantly, such analyses can also be used to prove the value of job retraining programs that do not issue degrees or certificates, as these programs are often not included in conventional success metrics. By comparing the wages of students before and after such training, colleges can demonstrate that programs of study that may not result in a completed degree nonetheless improve the wages of students who complete training.

Valencia College in Orlando, Florida created a brief video that offers information on labor outcomes to demonstrate the specific value a degree from their college provides. 15 The video shows that one dollar spent by a student on tuition increases their earnings by an average of \$5.60. It reveals that most of Valencia graduates have a job or have transferred to a four-year school immediately after completing their community college

credentials. The video also notes that Valencia graduates add \$781 million to the economy annually, which results in a return on every dollar invested by Florida taxpayers of 8.9%.

The California Community Colleges Chancellor's Office has also used data on the economic value of a community college education as an advocacy tool on behalf of its colleges. Five years ago, the Chancellor's Office worked with state legislators to access wage records held by the state Employment Development Department, allowing postsecondary education institutions to get aggregate reports on graduates' employment outcomes. Now, by examining employment and earnings outcomes data for graduates of the system's 112 community colleges, the Chancellor's Office has been able to assess the statewide return-on-investment for specific certificates and degrees and the system as a whole. For example, recent data indicate that three years after attaining a community college degree, California graduates earn nearly twice as much as they were earning before college. Vice Chancellor Patrick Perry observes that this kind of information has been enormously helpful in lobbying for continued investment in higher education in an incredibly constrained fiscal environment.

#### INVENTORY OF SOURCES OF LABOR MARKET DATA

There is a wide variety of data sources available to both colleges and students that can illuminate student employment outcomes as well as job openings in local, statewide, and national labor markets. Although not every data source summarized below is available to all colleges, each is now being used by many US colleges. Below is an inventory of data sources that colleges may want to consider as they explore the connection between their programs and labor market outcomes.



Unemployment Insurance Data

Unemployment insurance (UI) is a combined federal and state program to assist unemployed workers, and is funded by taxes on employers based on reported payroll amounts. Every state has UI laws and systems that are similar in some respects (due to federal requirements). Each quarter, states collect from employers the social security numbers and wages of most workers, excluding those who are selfemployed and federal and military employees. The state then uses these data to calculate unemployment compensation for individuals who lose their jobs and file for benefits.

Because of this mandate, states house a vast amount of information about who is working for whom, for how long they have been working, and how much they earn. By linking UI data to records of graduating students, colleges can learn about the percent of their graduates who are working, how long they have been employed, and how long they had to wait between graduating and their first jobs. Wage data in UI records include average starting earnings, average current earnings, and growth in earnings between the time programs are started and completed. These data cover the great majority of workers in each state, cover many years, and tend to be more accurate than many other data sources. 16

In some states, colleges can request employment and wage data about groups of graduates. To protect the privacy of individuals, wage and employment data are typically provided as averages for groups of students. Colleges usually send information about students to a state agency that has access to UI wage records, so the agency can find the wage records for these students, calculate averages, and release the aggregate data. For example, a college can send the state agencies a list of all students who graduated in 2005 with a degree in nursing and the state can send back its calculation of the number of those students who were employed and their average quarterly wages without indicating any specific graduate's employment status or earnings. The FERPA law and regulations restrict how colleges and state education agencies can release individual student data and must be followed when colleges or state higher education consortia release student information for matching with wage records.<sup>17</sup>

As discussed below, UI data availability varies by state, depending primarily on access limitations written into state law and the capacity of the state to provide reports to colleges. In addition, some states can provide data on graduates who have moved out-of-state, because they either have regional data sharing agreements or have signed on to the federal data sharing agreement known as the Wage Record Interchange System 2 (WRIS2).<sup>18</sup>

A well-constructed guide released by The Collaboratory and FHI360 provides detailed, step-by-step instructions and tools for colleges seeking to acquire and use UI data.<sup>19</sup>

#### Bureau of Labor Statistics Data

The US Bureau of Labor Statistics (BLS) regularly collects data on employment and earnings of US workers. Two websites provide colleges with readily accessible information on average wages by occupation and by geographic area.

The Occupational Outlook Handbook (OOH) is a web-based tool that provides a variety of information useful to both colleges and their students. For example, OOH provides comprehensive information about hundreds of major occupations, including national projected growth (2010-2020), total number of jobs, and median income. In addition, it offers an easy-to-use tool for job-seekers, allowing them to explore career areas through a search using one or more of the following parameters: median pay, education/training level, and projected growth. This tool is available at: http://www.bls.gov/ooh/.

Another web-based tool, the Overview of Wage Data by Area and Occupation, includes detailed wage data that can be reviewed by occupation and geographic area. It allows users to select a region or state, find a robust list of occupations, and gather information about employment rates and median wages in the region for each occupation. This resource is available at http://www.bls.gov/bls/blswage.htm.

## The Census Bureau Longitudinal Employer-Household Dynamics Program

The Longitudinal Employer-Household Dynamics (LEHD) program combines wage data from state agencies, including UI data, with information from the Census Bureau.<sup>20</sup> Included in this program are tools that colleges can use to determine labor market needs and wages in their communities, regions, and states.

The Industry Focus tool allows colleges to search states, counties, and metropolitan areas and gather, for each employment sector, number of employees, growth in employment, number of new hires, average monthly earnings, and other data that will reveal whether there are well-paying jobs in specific local economies and whether such jobs are growing or contracting. The tool allows for searches by age and gender.

The QWI Online tool also allows users to compare total employment, new hires, and average monthly earnings for their individual locations to statewide results. The tool allows users to narrow the results by age, gender, industry, and geographic location.

These data are usually updated quarterly and lag actual labor outcomes by 9-12 months, and they contain industry but not occupational data. These tools and their corresponding tutorial are available from the homepage: http://lehd.ces.census.gov/.

#### PayScale.com

Payscale.com is a proprietary company that gathers wage data by having individuals report their salaries, careers, and educational backgrounds.<sup>21</sup> The site has collected information from more than 30 million people. Although it provides free information on estimated salaries to individuals who fill out their survey, it charges others who want to research salaries for different positions. PayScale has ranked more than 850 US colleges by their college tuition return on investment, although community colleges are not included in this ranking. The ranking shows the cost of enrollment and the estimated average lifetime earnings for graduates of each institution. Individuals can also search for the average salary for BA graduates by college attended. Finally, students can search average salaries earned by individuas with different degrees (AA and AS included), majors, and occupations.

#### "Real-Time" Employer Demand Data

Burning Glass and Monster.com both sell aggregated information on the number of job postings within a given geographic area by occupation and industry, the foundational and specialized skills employers are looking for, and the credentials and certifications they are seeking. These data—generated from techniques that capture nearly all job postings on the internet—can be particularly useful for colleges seeking to build more effective programmatic responses to existing local labor market needs. They also provide demand-side information that can be useful to colleges conducting analyses of state and local labor market supply and demand.<sup>22</sup>

#### Other Private Labor Market Data Providers

There are a number of proprietary labor market data providers that offer data-based tools and customized services. The best known is Economic Modeling Specialists Intl. (EMSI), which regularly combines data from federal, state, and private sources in a database from which it pulls information relevant to local labor markets. Among other tools, EMSI has developed data analytic systems based on local labor market information and software colleges can use to provide students with customized regional wage information, including number of projected jobs, employment trends by occupation, and job postings.

### Gainful Employment Data

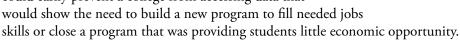
In June of 2011, the federal government required colleges with non-degree programs to report to the US Department of Education the percentage of former students repaying their loans and the debt-to-earnings ratio of graduates. Released in June 2012, the information includes the average debt owed and wages earned by students graduating from 3,695 vocational programs at 1,336 institutions. Still in its first year, the data sets have been criticized by some as lacking coverage of many community college programs. Moreover, a recent court order striking down the gainful employment regulations makes it unclear whether these data will be collected again in the future (which would require the issuance of new regulations consistent with the court opinion). Nonetheless, the 2012 data offer a unique way to assess the relative quality of different programs within a college and similar programs at different colleges. The full data set can found at <a href="http://studentaid.">http://studentaid.</a> ed.gov/node/275> and the debt to earnings ratios can be found through the Chronicle of Higher Education at <a href="http://chronicle.com/article/A-First-Look-at-Gainful/132589/">http://chronicle.com/article/A-First-Look-at-Gainful/132589/>.</a>

#### IMPROVING ACCESS TO AND USE OF LABOR MARKET DATA

Most of the resources described above are available to every college. However, wage data from unemployment insurance systems matched to the records of college graduates are not routinely available to colleges in all states. Policymakers can and should take steps to increase the availability of labor market data in forms that colleges can readily use, can easily be compared to outcomes for similar colleges and programs, and protect the privacy of individual graduates. However, this is a guide for colleges, not policymakers. So what can colleges do now to increase their ability to access and utilize labor market information?

# Request Wage Data and Advocate for Better, Clearer Access

As noted above, better access to wage data would enable colleges to more fully understand how to build strong paths to good jobs for their students. Today, some states readily provide aggregate wage data to colleges, but others have put in place significant hurdles that make it difficult or nearly impossible for colleges to gain access. For example, Michigan law limits colleges' access to aggregate UI data to circumstances in which a college is acting as a surrogate for a public official doing research.<sup>23</sup> A restrictive reading of this language could easily prevent a college from accessing data that



By asking for these data, colleges can help loosen legal restrictions on data access. To the extent colleges have trouble accessing data, such requests will advance the understanding of changes needed in state law and state analytic capacity. Once needed changes are understood, colleges can band together through their state systems or associations to advocate for increased access, using the denial of their reasonable requests as evidence that reforms are needed. Appendix A gives a list of agencies that oversee UI data in all 50 states, along with their contact information. Legislation that was passed in California that granted the Chancellor's Office access to UI data can be found in Appendix B.

# Advocate for Your State to Share Data Regionally or Nationally

One challenge with using UI data to assess the employment and earnings outcomes for graduates is that state UI systems only track graduates who are employed in-state. Thus, colleges generally cannot gather labor market information on graduates of state colleges who leave the state for jobs.

Some states have ameliorated this problem by creating regional data sharing agreements under which participating states can access information about their colleges' graduates who work in bordering states.<sup>24</sup> Colleges and their associations and systems should advocate for the creation and expansion of such agreements to increase availability of employment and earnings information about out-of-state graduates.

In addition, states are beginning to share data through a national agreement through the Wage Record Information System 2. To date, 22 states have signed this US Department of Labor agreement, which authorizes participating states to access unemployment insurance data for specified purposes from other states that have signed the agreement. Although colleges may only access WRIS2 data for certain purposes by creating a data agreement with the relevant state agency, the agreement clearly expands availability in many states for some uses. For this reason, colleges and their associations and systems should take an active role in advocating for states to sign WRIS2 to increase access to cross-state UI data. To learn more about WRIS2, see Appendix C. To see if your state is currently a signatory to the WRIS2 agreement, see Appendix D.

## Advocate within Your State for Regular, Consistent Reporting on Wage Outcomes

The process of gathering and assessing UI data that is useful to college administrators and educators requires technical expertise. To ensure efficiency and consistency of reporting, states should develop regular reports designed to inform college decision-making. An example of such reporting comes from the Florida Education and Training Placement Information Program, which provides aggregated data to colleges regarding students who have left the institution, including their employment, wages, and continuing educational pursuits.<sup>25</sup>

For such reports to be most useful, colleges should be actively engaged in their development. Accordingly, college administrators and practitioners should approach systems, providing a list of reports that answer specific questions the college has about the effectiveness of labor market alignment of programs. Then, colleges should work on the development of the actual reports, ensuring that they consider nuances specific to each college's goals and programs. States and college system offices can and should play a central role alongside community colleges in fostering the development of such uniform reports.

#### Build Capacity for Interpreting and Disseminating UI Data within Colleges

Whether graduates' employment outcomes are gathered by colleges individually or provided by states or systems, having the information is just the first step. Decision-makers on college campuses need to understand these data and how to use them. Colleges should consider and support the kinds of professional development that will enable staff to integrate employment success metrics into existing processes for measuring student outcomes.

For example, if program review is to take employment and earnings data into account, those conducting that review and making recommendations need to understand the reliability and value of the labor market data being considered. If student service professionals are to use these data to help students choose programs, the state needs to put them in formats that provide clear presentations and explanations of the information, and professionals and students need to be trained in how to use them.

#### **C**ONCLUSION

Educators hold a unique responsibility to make sure their students are prepared for whatever comes after they graduate. By analyzing wage and employment data and engaging in open and honest conversations with employers—colleges can better align the education they offer with what students need to succeed after graduating. They can better ensure that their programs are providing students with the skills and abilities they have a right to expect a college education will confer. Labor market information is increasingly available, and our hope is that this guide promotes its constructive use.

#### **ENDNOTES**

- Carnevale, A., Rose, S. J., & Cheah, B. (2011). The college payoff. Washington, DC: Georgetown University, Center on Education and the Workforce. Retrieved from http://cew.georgetown.edu/collegepayoff/
- Carnevale, A. P., Jayasundera, T., & Cheah, B. (2012, August). The college advantage: Weathering the economic storm. Washington, DC: Georgetown University, Center on Education and the Workforce. Retrieved from http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/CollegeAdvantage.FullReport.081512.pdf
- See, for example, the labor market findings resulting from a partnership between the Tennessee Higher Education Commission and College Measures in a recent report, Schneider, M., & Vivari, B. (2012, September). The earnings power of graduates from Tennessee's colleges and universities. Rockville, MD: CollegeMeasures. org. Retrieved from http://www.air.org/files/Earning\_Power\_TN\_Graduates\_Sept12.pdf
- Bureau of Labor Statistics. (2012, April 6). Retrieved from http://www.bls.gov/ooh/healthcare/radiation-therapists.htm
- 5 Bureau of Labor Statistics. (2011, May). Retrieved from http://www.bls.gov/ooh/healthcare/home.htm
- Several states operating independently or in conjunction with the Statewide Longitudinal Data Systems (SLDS) Grant Program (a federal grant system designed to aid states in designing and implementing longitudinal pre-K through workforce data systems) have begun to collect these data. However, even in cases where states have data there is often a lack of capacity to analyze and understand how these data can be used.
- This criticism should not be read to suggest that colleges should never use survey data, but rather that steps can be taken to improve its reliability (as described in the section below about Monroe College) and that it should be supplemented by other labor market data described below.
- See for example, Schneider, M., & Vivari, B. (2012, September). The earnings power of graduates from Tennessee's colleges and universities. Rockville, MD: CollegeMeasures.org. Retrieved from http://www.air.org/files/Earning\_Power\_TN\_Graduates\_Sept12.pdf
- UI regulations are at 20 CFR Part 603. The FERPA law and regulations are at 20 U.S.C. 1232g and 34 CFR Part 99.
- 10 Association of Private Colleges and Universities, v. Arne Duncan, Secretary of The Department Of Education, and United States Department of Education (2012), Retrieved from https://ecf.dcd.uscourts.gov/cgi-bin/show\_public\_doc?2011cv1314-25
- 11 Although the quality of many surveys is hampered, in part, by low response rates, Monroe has achieved an aggregate response rate on its graduate surveys of 70%. The college sends an email survey to its graduates six months after completion, followed by a mailed survey to those who have not responded, and a phone survey to capture feedback from the remaining students. Phone calls are conducted by an external agency.
- 12 Monroe reports that it has shuttered approximately 13 programs since 2008.
- Jenkins, D. (2011). Get with the program: Accelerating community college students' entry into and completion of programs of study. New York: Community College Research Center. Retrieved from http://ccrc.tc.columbia.edu/Publication.asp?UID=885
- 14 Central Lakes' use of labor data began in response to a mandate from the state legislature requiring all colleges in the Minnesota State Colleges and Universities system provide labor market and wage data to students in all diploma/certificate programs available for financial aid. The state Department of Employment and Economic Development (DEED) provides these data to the colleges.
- 15 Valencia College. (2012). Valencia counts. Retrieved from http://vimeo.com/41973447
- 16 These data sets have a few limitations: First, not all employees are covered (e.g., agricultural and railroad employment are omitted). Second, these data do not include the number of hours that were worked to earn the reported wage, when within the quarter the employee started, or the occupation of the worker.
- 17 FERPA allows the release of "directory information," which may include student names, degrees, and date of graduation, but students can opt to keep this information private. In addition, FERPA outlines a process for the state education authority, such as a higher education agency, to designate another state agency as its "authorized representative." This designation allows a transfer of student data to evaluate postsecondary programs. The Department of Education's Privacy and Technical Assistance Center and Family Privacy Compliance Office can provide technical assistance on FERPA. See http://ptac.ed.gov/ or http://www2.ed.gov/ policy/gen/guid/fpco/index.html
- 18 See Appendices C and D for more information on WRIS2.
- 19 Feldbaum, M., & Harmon, T. (2012). Using unemployment insurance wage data to improve program employment outcomes: A technical assistance guide for community and technical colleges. The Collaboratory and FHI360.
- 20 A subset of these data is contained in the Local Employer Dynamics (LED) program.
- 21 Because the data are collected from people who use the website and self-report wages, these data should be used cautiously.
- 22 Real-time data like these should be treated with caution because they can overstate openings when one job is posted in multiple places or remains posted after the job has been filled.
- 23 Employment Security Act, Section 4210.11 (viii). Data are "available for use in connection with research projects of a public service nature to a college, university, or agency of this state that is acting as a contractor or agent of a public official and conducting research assists the public official in carrying out the duties of the office." Retrieved from http://www.michigan.gov/documents/uia\_mesact\_76382\_7.pdf
- 24 See for example, Facilitating Development of a Multistate Longitudinal Data Exchange. This is a data sharing agreement between Hawaii, Idaho, Oregon, and Washington that is funded by Bill and Melinda Gates Foundation through the Western Interstate Commission for Higher Education (WICHE).
- 25 In 2012, an additional law (HB 7135) was passed that requires public university and community colleges to create annual system-wide, institution-wide, and disciplinelevel reports that show the employment and earnings of graduates. These data will be made available to every parent and student.

# Appendix A:

# **Contacts for State UI Tax Information and Assistance**

(As of August 2012)

State	Address	Telephone / Website
Alabama	Department of Industrial Relations 649 Monroe Street Montgomery, AL 36131-0099	(334) 242-8830 www.dir.alabama.gov
Alaska	Employment Security Tax Dept of Labor and Workforce Development PO Box 115509 Juneau, AK 99811-5509	(888) 448-3527 www.labor.state.ak.us/estax/
Arizona	Unemployment Tax - 911B Department of Economic Security PO Box 6028 Phoenix, AZ 85005-6028	(602) 771-6601 www.azdes.gov/esa/uitax/uithome.asp
Arkansas	Department of Workforce Services PO Box 2981 Little Rock, AK 72203-2981	(501) 682-3798 www.arkansas.gov/esd/Employers/
California	Account Services Group, MIC-90 Employment Development Department PO Box 942880 Sacramento, CA 94280	(888) 745-3886 www.edd.ca.gov
Colorado	Unemployment Insurance Operations Department of Labor and Employment PO Box 8789 Denver, CO 80201-8789	(800) 480-8299 www.colorado.gov/CDLE
Connecticut	Connecticut Department of Labor 200 Folly Brook Blvd Wethersfield, CT 61091-1114	(860) 263-6550 www.ctdol.state.ct.us
Delaware	Division of Unemployment Insurance Department of Labor PO Box 9950 Wilmington, DE 19809-0950	(302) 761-8484 www.delawareworks.com
District of Columbia	Department of Employment Services Office of Unemployment Compensation Tax Division 609 H Street NE, 3rd floor Washington, DC 20001-4347	(202) 698-7550 www.dcnetworks.org
Florida	Unemployment Compensation Services Agency for Workforce Innovation 107 E. Madison St. MSC 229 Tallahassee, FL 32399-0180	(800) 482-8293 dor.myflorida.com/dor/uc

Georgia	Department of Labor 148 Andrew Young Inter Blvd, Suite 800 Atlanta, GA 30303-1732	(404) 232-3301 www.dol.state.ga.us
Hawaii	Department of Labor and Industrial Relations 830 Punchbowl Street, Room 437 Honolulu, HI 96813-5096	(808) 586-8913 www.hawaii.gov/labor
Idaho	Department of Labor 317 W Main Street Boise, ID 83735-0002	(800) 448-2977 http://labor.idaho.gov/
Illinois	Department of Employment Security 33 South State St Chicago, IL 60603	(800) 247-4984 www.ides.state.il.us
Indiana	Department of Workforce Development 10 North Senate Ave Room SE 106 Indianapolis, IN 46204-2277	(317) 232-7436 www.in.gov/dwd
Iowa	Workforce Development 1000 East Grand Avenue Des Moines, IA 50319-0209	(515) 281-5339 www.iowaworkforce.org/ui
Kansas	Department of Labor 401 SW Topeka Blvd Topeka, KS 66603-3182	(785) 296-5027 www.dol.ks.gov
Kentucky	Department for Employment Services PO Box 948 Frankfort, KY 40602-0948	(502) 564-2272 www.oet.ky.gov
Louisiana	Louisiana Workforce Commission PO Box 94094 Baton Rouge, LA 70804	(225) 342-2944 www.laworks.net/homepage.asp
Maine	Department of Labor PO Box 259 Augusta, ME 04332-0259	(207) 621-5120 www.state.me.us/labor
Maryland	Department of Labor, Licensing, & Regulation 1100 North Eutaw Street Room 414 Baltimore, MD 21201-2201	(800) 492-5524 http://www.dllr.state.md.us/
Massachusetts	Division of Employment and Training 19 Staniford Street Boston, MA 02114-2589	(617) 626-5050 http://www.mass.gov/lwd/

Michigan	Department of Labor & Economic Growth 3024 W Grand Blvd Detroit, MI 48202-6024	(313) 456-2180 www.michigan.gov/uia	
Minnesota	Department of Employment & Economic Development 332 Minnesota Street, Suite E200 St. Paul, MN 55101-1351	(651) 296-6141 www.uimn.org/tax	
Mississippi	Department of Employment Security PO Box 1699 Jackson, MS 39215-1699	(866) 806-0272 www.mdes.ms.gov	
Missouri	Division of Employment Security PO Box 59 Jefferson City, MO 65104-0059	(573) 751-3340 www.labor.mo.gov	
Montana	Unemployment Insurance Division PO Box 6339 Helena, MT 59604-6339	(406) 444-3834 www.uid.dli.mt.gov	
Nebraska	Department of Labor Box 94600 State House Station Lincoln, NE 68509-4600	(402) 471-9940 www.dol.nebraska.gov	
Nevada	Department of Employment Training and Rehabilitation 500 East Third Street Carson City, NV 89713-0030	(775) 684-6300 https://uitax.nvdetr.org	
New Hampshire	Department of Employment Security 32 South Main Street Concord, NH 03301-4857	(603) 228-4033 www.nhes.state.nh.us	
New Jersey	Department of Labor & Workforce Development PO Box 947 Trenton, NJ 08625-0947	(609) 633-6400 lwd.dol.state.nj.us	
New Mexico	Department of Workforce Solutions PO Box 2281 Albuquerque, NM 87103-2281	(505) 841-8576 www.dws.state.nm.us	
New York	Department of Labor State Campus, Building 12 Room 500 Albany, NY 12240-0339	(518) 457-4179 www.labor.state.ny.us	

North Carolina	Employment Security Commission PO Box 26504 Raleigh, NC 27611-6504	(919) 707-1150 www.ncesc.com
North Dakota	Job Service of North Dakota PO Box 5507 Bismarck, ND 58506-5507	(701) 328-2814 www.jobsnd.com
Ohio	Department of Job & Family Services PO Box 182404 Columbus, OH 43218-2404	(614) 466-2319 www.jfs.ohio.gov
Oklahoma	Employment Security Commission PO Box 52003 Oklahoma City, OK 73152-2003	(405) 557-7143 <u>www.ok.gov/oesc_web</u>
Oregon	Employment Department 875 Union Street NE Room 107 Salem, OR 97311-0030	(503) 947-1488, option 5 (503) 947-1537 FUTA www.oregon.gov/employ/tax
Pennsylvania	Dept of Labor and Industry 7th and Forster Street, Room 915 Harrisburg, PA 17121-0001	(717) 787-7679 www.dli.state.pa.us
Puerto Rico	Department of Labor and Human Resources PO Box 1020 San Juan, PR 000919	(787) 754-5818 www.dtrh.gobierno.pr/
Rhode Island	Division of Taxation One Capitol Hill, Ste 36 Providence, RI 29085-5829	(401) 574-8700 www.uitax.ri.gov
South Carolina	Employment Security Commission PO Box 995 Columbia, SC 29202-0995	(803) 737-3075 dew.sc.gov
South Dakota	Department of Labor PO Box 4730 Aberdeen, SD 57402-4730	(605) 626-2312 dol.sd.gov
Tennessee	Department of Labor and Workforce Development 220 French Landing Drive Nashville, TN 37243	(615) 741-2486 www.state.tn.us/labor-wfd/esdiv.html
Texas	Workforce Commission PO Box 149037 Austin, TX 78714-9037	(512) 463-2700 www.twc.state.tx.us

Utah Department of Workforce Services (801) 526-9400 PO Box 45288 www.jobs.utah.gov

Salt Lake City, UT 84145-0288

Vermont Department of Labor (802) 828-4252

PO Box 488 www.labor.vermont.gov

Montpelier, VT 05601-0488

Virgin Islands Department of Labor (340) 776-1440

> PO Box 302608 www.vidol.gov

St. Thomas, VI 00803-2608

Virginia **Employment Commission** (804) 371-7159

PO Box 1358 www.vec.virginia.gov/vecportal/employer/em

Richmond, VA 23218-1358 ployer\_services.cfm

Washington **Employment Security Department** (360) 902-9360

PO Box 9046 www.esd.wa.gov/uitax/index.php

Olympia, WA 98507-9046

West Virginia **Bureau of Employment Programs** (304) 558-2676

112 California Avenue www.wvcommerce.org/business/workforcewv

Wisconsin Department of Workforce Development (608) 261-6700 http://dwd.wisconsin.gov/

PO Box 7942 Madison, WI 57307-7942

Charleston, WV 25305-0016

Wyoming **Unemployment Tax Division** (307) 235-3217

PO Box 2760

http://wyomingworkforce.org/employers-Casper, WY 82602-2760

and-businesses/unemployment-

insurance/Pages/

# Appendix B:

# California Legislation Authorizing Postsecondary Institutions' Access To Employment Development Department Data

Assembly Bill 798 (2007)

AB 798, Committee on Insurance. Unemployment insurance: unemployment compensation benefits.

(1) Existing law requires the Director of Employment Development to permit the use of any information in his or her possession to the extent necessary for specified purposes.

This bill would additionally require the director to provide, to the extent permitted by federal law, the California Community Colleges Chancellor's Office with each student's quarterly wage information, as provided, to be used for specified purposes.

(2) Under existing law, unemployment compensation benefits are based on wages paid in a base period that is calculated according to the month within which the benefit year begins. Existing law establishes alternative definitions of base period for claims filed on or after January 1, 1990, and before January 1, 1992.

This bill would delete those alternative definitions that are now obsolete.

- (3) (A) This bill would incorporate additional changes to Section 1095 of the Unemployment Insurance Code, proposed by SB 869, to be operative only if SB 869 and this bill are both enacted, each bill amends Section 1095 of the Unemployment Insurance Code, AB 8 is not enacted, or if enacted, does not amend that section, and this bill is enacted after SB 869.
- (B) This bill would incorporate additional changes to Section 1095 of the Unemployment Insurance Code, proposed by AB 8, to be operative only if AB 8 and this bill are both enacted, each bill amends Section 1095 of the Unemployment Insurance Code, SB 869 is not enacted, or if enacted, does not amend that section, and this bill is enacted after AB 8.
- (C) This bill would incorporate additional changes to Section 1095 of the Unemployment Insurance Code, proposed by SB 869 and AB 8, to be operative only if SB 869, AB 8, and this bill are all enacted, all 3 bills amend Section 1095 of the Unemployment Insurance Code, and this bill is enacted after SB 869 and AB 8.

For the full text of Assembly Bill 798, see http://www.leginfo.ca.gov/pub/07-08/bill/asm/ab\_0751-0800/ ab\_798\_bill\_20071005\_chaptered.html

Senate Bill X5 1 (2009)

- SB 1, Steinberg. Public schools: Race to the Top.
- (1) The Education Data and Information Act of 2008 requires the State Chief Information Officer to convene a working group representing specified governmental entities that collect, report, or use individual pupil education data to create a strategic plan to link education data systems and to accomplish objectives relating to the accessibility of education data.

This bill, in addition, would authorize the State Department of Education, the University of California, the California State University, the Chancellor of the California Community Colleges, the Commission on Teacher Credentialing, the Employment Development Department, and the California School Information Services to enter into interagency agreements in order to facilitate specified objectives regarding the implementation of a longitudinal education data system and the transfer of education data.

For the full text of Senate Bill X5 1, see: http://www.leginfo.ca.gov/pub/09-10/bill/sen/sb\_0001-0050/ sbx5\_1\_bill\_20100107\_chaptered.html

# **Appendix C:** Understanding the Wage Record Interchange System 2 (WRIS2)

## The Establishment of WRIS

The Workforce Investment Act (WIA) of 1998 provides funding for states to set up local career centers where citizens can access employment services. WIA also mandates that, to receive federal funds, states have to prove that the programs they run through these centers are effective. When WIA was passed, tracking the effectiveness of WIA programs was difficult because employment and wage data are collected at the state level, making it hard to track the outcomes of people who had participated in vocational programs and then moved across state lines. To facilitate better reporting, a data sharing system was created called the Wage Record Interchange System (WRIS).

Although participation in WRIS is voluntary, all 50 states have signed on to the WRIS data sharing agreement. Any state can now acquire employment and wage data from across the nation by requesting the material from a state agency that aggregates the records and strips them of all private information. These aggregated reports can be used to determine if workforce training programs funded through the Department of Labor (DOL) are effective. Although this data system could produce information useful to many interested in employment outcomes (e.g., companies and colleges), the data gathered under WRIS may only be used for assessing the effects DOL programs.

## Expansion to WRIS2

Today, the US Department of Labor is asking states to sign an agreement known as WRIS2, which would allow access to multi-state wage data for specific non-DOL training, education, annd social service programs. This new agreement should allow better tracking of employment outcomes to determine if post secondary programs align with labor market needs.

Among the permissible uses of the data under WRIS2 is "To obtain wage data to prepare Aggregate Statistical Reports and analyses to satisfy the reporting and performance requirements under federal or state legislation, or federal or state regulation, for . . . secondary and post-secondary education programs." Currently, the Department of Labor is taking a narrow interpretation of the agreement, advising that the data sharing system is limited to specific programs regulated by state and federal governments. However, as state and federal laws increasingly require colleges to track labor market results of their degrees and certificates, WRIS2 should provide a key mechanism for states to assess the effectiveness of colleges and programs.

Twenty-two states have signed on to this new agreement (see Appendix D for states signed on as of May 21, 2012). Signatory states now have access to data collected by other signatory states and can get more complete and accurate information than those that have not yet signed.

<sup>\*</sup> WRIS2 Data Sharing Agreement, 2011, p. 9

# **Appendix D: WRIS2 Participants**

#### **WRIS2 Participants**

#### **Non-Participants**

Alabama Arkansas South Carolina Idaho Alaska Vermont Illinois Arizona Virginia

Indiana California Washington West Virginia Kentucky Colorado Connecticut Wisconsin Louisiana

Delaware Maryland Minnesota Florida Mississippi Georgia Missouri Hawaii Nebraska Iowa Nevada Kansas Maine New Jersey

Oklahoma Massachusetts Michigan Oregon Pennsylvania Montana

Rhode Island New Hampshire South Dakota New Mexico New York Tennessee

Texas North Carolina Utah North Dakota

Wyoming Ohio



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